

REMARKS

Claims 197 to 200 and 202 to 214 are pending in this application. Claims 1 to 196 have been withdrawn in response to a Restriction Requirement. Claim 201 has been canceled. Claims 197 and 202 to 204 have been amended. No new matter has been added by these claim amendments.

REJECTION OF CLAIMS 197 TO 214 UNDER § 112, SECOND PARAGRAPH - DEFINITENESS

The Examiner has rejected claims 197 to 214 for indefiniteness and in particular has asserted deficiencies in claims 197, 198, 201, 203 and 204. To alleviate the Examiner's concerns, claims 197 and 204 have been amended in accordance with the Examiner's instructions. Applicants herein respectfully present arguments in favor of the definiteness of the remaining claims.

In accordance with the Examiner's suggestion, claim 197 has been amended to provide for the claimed arrays by clarifying that the cells contemplated in the apparatus of the claim are to be found in "discrete locations." Claim 197 has further been amended to clarify that the receptacles of the claim need only be capable of containing cells. Claim 197 has additionally been amended to provide for greater clarity. Applicants respectfully request the Examiner's related rejections be withdrawn.

Also in accordance with the Examiner's suggestion, claim 204 has been amended to remove the article "the" from the term "the wells" so that no antecedent basis is now required. Applicants respectfully request this objection be withdrawn.

Claims 202 and 203 have additionally been amended to correct typographical errors.

As to the remaining objections for lack of definiteness, please consider the following arguments in support of the definiteness of the claims:

The Examiner asserts that claim 198 is unclear as to how the claim element of independent claim 197, "said further experimentation," is additionally narrowed by defining the element as one of six listed experiments, namely cell transfection, cell injection, *in vitro* fertilization, hybridoma screening, patch-clamp experiments, or single cell PCR.

Applicants respectfully traverse the Examiner's assertion of indefiniteness. The "further experimentation" limitation of claim 197 encompasses any experimental study conceived by the

artisan wherein arraying from one to about five cells into discrete locations is helpful for the experiment. Applicants have provided six examples of common experiments that are benefited by the teachings of this invention. *See* Application at p. 2, paragraph 1. The skilled artisan would recognize many more. Therefore, the limitation in claim 198 of the genus of "said further experimentation" to six specific examples is clearly a further limitation of the device of claim 197. Applicants respectfully request the Examiner withdraw this objection.

The Examiner has objected to claim 201. Claim 201 has been canceled. The objection should therefore be moot and Applicants respectfully request withdrawal of said objection.

The Examiner has objected to claim 203 because the Examiner asserts it is unclear how the cell isolation device of claim 203 relates to the receptacles of claim 197 and how the isolation device functions to isolate cells in relation to the receptacles of claim 197. Applicants believe this claim is particularly clear in view of the teachings of the application at Figure 5 and the description provided therewith at pages 7 and 8. Figure 5 and its concomitant description provide concrete examples of cell isolation devices and their relationship to the receptacles of the device of claim 197. Figure 5A teaches a micro through-hole containing membrane, which is mated to the receptacle in the substrate. Figure 5B further teaches a membrane having inverted wells with a periodicity matching the array of magnetic receptacles on the substrate. The figures and descriptions provide both the device and its method of function. Because the application provides teachings as to how the cell isolation device of claim 203 relates to the receptacles of claim 197 and how such devices function, Applicants request the Examiner withdraw the rejection of claim 203.

The remaining claims depend from claim 197 and, in view of the amendment of claims 197, 203 or 204 and in light of the preceding arguments, should be found definite. Applicants respectfully request the Examiner's objections for definiteness be withdrawn.

REJECTION OF CLAIMS 197 TO 214 UNDER § 103 - OBVIOUSNESS

The Examiner has rejected claims 197 to 214 over Ekenberg *et al.* (5,567,326) in view of Dolan *et al.* (6,136,182) and Liberti *et al.* (5,968,820). The Examiner asserts that: (1) Ekenberg discloses "an apparatus for separating magnetically responsive particles" using "magnetically responsive pins in a pin plate that form a pin array;" (2) Dolan discloses a device for collecting "magnetically labeled cells . . . on an interior surface of a vessel in an ordered array;" and (3) Liberti discloses "magnetic immobilization and manipulation of cells."

The Examiner suggests that it would have been “obvious to modify the apparatus of Ekenberg *et al.* by replacing the pins with . . . magnets . . . so that cells are drawn to and immobilized on the bottom surface of each well as suggested by Dolan *et al.* . . . and[, as per] Liberti *et al.*[,] placing a vessel into a magnetic field . . . where magnetically-labeled cells are attracted toward the collection surface and immobilized thereon in a linear array.”

The Examiner also asserts that “[o]ne would have been motivated to make this modification to provide immobilized cells in a condition to be observed and further analyzed as in Dolan *et al.* and Liberti *et al.* The Examiner further cites Zborowski *et al.* as suggesting conditions for magnetic separation of cells.

Applicants respectfully traverse the Examiner’s argument because not all elements of the claims are disclosed or suggested in the above references. The references do not disclose or suggest the limitation of “from one to about five cells . . . immobilized in each of said magnetic receptacles.” In fact, the references provide no teaching on limiting the number of cells at a “discrete location” so to facilitate “further experimentation.” Because these limitations are not taught by the references, are not inherent in those references and would not have been conceived by an artisan exposed to those references, the claims should be considered non-obvious over the cited references. The conditions for magnetic separation of cells taught by Zborowski provide no further disclosure of the herein discussed missing elements.

Because the Examiner has not presented art containing at least three separate elements of the claims, Applicants respectfully request the Examiner withdraw the rejection of claims 197 to 214 for obviousness.

CONCLUSION

Applicants submit that the claims are in condition for allowance. Applicants authorize the Commissioner to charge the requisite fee for the extension as well as any other fee due or credit any overpayment arising from this communication to Deposit Account No. 11-0600.

An early and favorable action on the merits is earnestly solicited.

Respectfully submitted,

KENYON & KENYON

Dated: August 19, 2005

Teresa Lavenue

Teresa A. Lavenue
Reg. No. 47,737

1500 K Street, N.W.- Suite 700
Washington, DC 20005
Telephone: 202/220-4200
Facsimile: 202/220-4201